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COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS

U. S. Department of Agriculture  
and State Agricultural Colleges  
Cooperating

Extension Service, Office of  
Cooperative Extension Work,  
Washington, D.C.

RECEIVED

COORDINATING EXTENSION MARKETING, FARM MANAGEMENT, AND PRODUCTION PROGRAMS FROM A MARKETING STANDPOINT\*

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U. S. Department of Agriculture

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The assignment of this subject has caused the writer considerable concern for we have been able to find but little published material dealing specifically with coordinating relationship of commodity subject matter extension projects. Since developments along these lines have been recent and have not yet apparently found their way into printed form we directed the following query to eight central states. "Do you have any operative or planned extension activities in your State which attempts to coordinate extension marketing, farm management and production programs into a unified county project adapted to its community needs?" In the replies received we noted that many of the States were giving the question considerable thought and in a few instances had done some work along these lines, although no written continuous program of projects has yet been evidenced. As one State puts it, "no doubt, we are groping in that direction." Some of the statements made are significant.

A representative of The Farm Management Department of The Missouri College of Agriculture makes the following comment:

"At this time, I am engaged in writing up a new program of work in which I propose to use as a vehicle for farm management extension, and if possible, for marketing extension, the agricultural outlook project. In the past three years, we have been holding a State wide series of one day regional agricultural outlook conferences in February and March, 2nd, a less extensive series on individual commodity price situations in the summer or fall months, as the occasion justifies.

"While this type of extension work has been an unqualified success and has met with the enthusiastic approval and plainly evident interest of farmers, we have felt that there should be tied in with this work year round activities on the part of county extension agents, local leaders and

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\*Address presented before the Central States Extension Conference, Purdue University, La Fayette, Ind., April 24 to 26, 1929.

DISTRIBUTION: A copy of this pamphlet has been sent to extension directors, marketing extension specialists, and State county agent leaders.

the specialist concerned, in which method and result demonstrations would be a part. A "Farm Budgeting Project" would seem to offer a foot hold for such demonstrations in farm management and a means of developing some farm management demonstrations through farm accounting. As yet, we have not been able to settle upon a definite tie up of marketing extension work with this program of work."

A different approach is seen by the following statement made by The Department of Rural Economics of the University of Nebraska:

"The farm management and market specialists office in the Department of Rural Economics and are responsible to the department for subject matter. As a result their programs are coordinated, although they are really distinct programs instead of one enlarged program.

"Several of the county extension agents are planning to use the results from farm record books rather extensively as a basis for a county production program. The agent in Cass County, Nebraska, where we have had the most farm account books for the longest period of time is using his results quite extensively as a basis for his production program. He is succeeding so well that quite a good many of the other agents have come to believe that his plan furnishes the only definite base."

A third viewpoint is expressed by a representative of the Department of Markets of the University of Kentucky. His summary is as follows:

"In Kentucky we have attempted practically nothing along this line with the exception of egg marketing, which has been planned and which will be carried out at a future time.

"Our marketing specialist worked with the county agent in Grayson County, Kentucky, and visited a number of buyers of eggs in that county. At these visits the need for buying according to grade was emphasized and it is hoped that the buyers will cooperate with us and buy eggs according to grade. One big buyer has already agreed to buy eggs according to grade. It is planned as soon as the buyers agree to buy eggs according to grade to go into Grayson County and hold a series of meetings. These meetings will be attended by our marketing specialist and by a poultry specialist from the Poultry Department. The marketing specialist will discuss the marketing of eggs with special emphasis on the need for careful grading and the buying of eggs according to grade. He will also demonstrate egg grading at the meetings. The poultry specialist will talk generally in regard to poultry production and emphasize the need for standardization of breeds to get eggs of uniform color and also the need for proper feeding and proper handling of eggs. Such a program we feel will result in a large percentage of good eggs being sold in Grayson County, and will also mean that the producer will be paid a higher price for good eggs.

"While in Minnesota I did some marketing extension work. One of our projects was to improve the quality of products marketed by growers in Minnesota. A series of potato schools were held which I attended as mar-

keting specialist, and Mr. Rose, our extension plant pathologist, was also present. I talked about the economic situation in the potato industry and the need for marketing high grade potatoes. In this connection I emphasized proper grading and demonstrated the U. S. grades. Mr. Rose talked about potato production, especially methods of disease control. We felt this was essential because it is necessary to produce potatoes free from disease if potatoes of high quality are to be marketed. These meetings were fairly well attended and were a means of educating the grower to produce better potatoes and market them properly."

A different type of development is noted in Indiana where detailed studies of agricultural conditions have been made in a number of counties. They plan to use the data secured as a basis of extension work. In Ohio, county analysis stressing the sources of income is growing in use as a guide for building county programs. Seasonal meetings on timely economic information have been successfully conducted in both Ohio and Iowa during the past two or three years.

From the above comments we note three plans each attempting to bring about a closer correlation of certain extension activities - one between marketing and farm management, one between farm management and production and one between marketing and production. Every State must necessarily develop its own individual approach to the problem. A plan suitable to one may not meet the required conditions of another. It should make little difference, however, whether farm management, production or marketing is used as the vehicle of program development if there is a real need and a demand for a correlated program. Certainly a closer unity of working relationships will grow out of these associations as the proposed projects pass through the actual operative stage of experimentation.

The time has certainly arrived when we can no longer think of the problems involved in any extensive scale of agricultural marketing, or deal with the economics of market movements of products, or reduce the handling and distributive food losses without encountering some of the difficulties found in the production processes.

For example, we know of an Ohio county where about 66% of the veal calves sell for a premium on the market. Consequently those who sell calves are generally well satisfied with their returns. This condition when analyzed, however, is largely a reflection of a pure bred sire project put on in the county some six or seven years ago. In this same county only about 40% of the lambs are being sold in the top grades on the market. Obviously many of the sheep producers have not been satisfied with the market grades received and the corresponding price paid for their lambs. They think something is wrong and they are right. But the trouble exists largely with the producer. He does not appreciate the relationship and the importance of controlling parasites and the necessity of proper feeding if he is to make finished lambs at the weight demanded by the higher quality market grades.

To further illustrate the marketing viewpoint we might analyze some of the losses which occur during the process of marketing hogs. Approximately 150,000 hog carcasses were condemned under Federal Inspection in 1928. On the basis of the average Chicago price paid for packer and shipper purchases this loss approximated three and a quarter million dollars. It is important to note in this connection that 49% of this loss was due to hog cholera and tuberculosis, two farm diseases, the control of which lies almost entirely within the hands of the producer. Sooner or later packer killing sheets will determine the location of heavy disease infected areas. Under such conditions one cannot criticise the packer for avoiding further purchases from these districts, as first choice, or a discounting of price paid accordingly to cover the occurrence of such loss. There are places in the Corn Belt where such conditions exist. The producer who is unfortunate enough to be raising hogs in such places has a real marketing problem to meet. In Ohio this situation becomes more critical where cooperative direct-to-packer selling is being developed in some counties on the basis of a guaranteed yield and disease free carcasses on the rail. On the other hand these marketing losses are small compared to corresponding production losses. The average annual farm loss from hog cholera alone was approximately \$20,000,000 for the years 1920 to 1928 inclusive according to a statement made by the Bureau of Animal Industry. No one can deny an existing relationship in this situation. The elimination of these farm losses would automatically eliminate the corresponding market losses.

Since this loss problem is combined in both the production and the marketing processes it would seem that the best extension approach to its solution would be by a combined project executed by both a marketing specialist and a hog production specialist. The producer point of view should be the guide to its development. The farmer, not the extension service, is face to face with the problems involved in the production and marketing of quality hogs. Thus the extension man in marketing must concern himself not only with specific marketing problems but with farm and community problems related to marketing.

Considerable work along these lines has been done on a coordinated extension marketing and extension production project in Ohio during the past two years. To illustrate the method of approach we will make a rather detailed statement covering the development of our operative marketing and production swine program.

Back in 1926 we received a request from Mr. R. W. Munger, county agricultural agent of Shelby County, to attend the annual meeting of the Shelby Livestock Cooperative Association. The chief problem for discussion was that of raising the shipping costs four cents per hundredweight in order to meet a growing treasury deficit. After due deliberation the members voted the increase. However, the board was not satisfied that the trouble had been corrected and later authorized a complete analysis of the shipping records in order to determine the source of the leak. The county agent and myself were asked to cooperate with the manager in formulating plans for the making and the supervision of the study. In this connection

we secured Mr. W. B. Stout, the Smith Hughes Vocational Agricultural Instructor of the Sidney High School to do the work; he, in return to receive graduate credit at the University.

A complete analysis of the shipping records was made for the years of 1925 and 1926. It developed that a loss of \$3500 was incurred to the association due to dead and crippled animals in transit. A further analysis showed that 82.4% of the loss had occurred in the hog consignments which comprised 63% of the total head shipments for the two years. This hog loss was equivalent to an insurance fund cost of seven cents for every hundred pounds shipped in 1925 and eleven cents for every hundred pounds shipped in 1926 or an average for the two years of 8.5 cents. This loss constituted about half of the total home marketing charges of the association. Apparently this was one reason why the total marketing costs had been advanced from 73.9 cents in 1925 to 76.9 cents per hundredweight in 1926 with a decline in volume of 30 decks.

Part of this dead and crippled loss was attributed to improper loading on the part of this manager, part to rough handling by the railroad, and part to the improper handling of the hogs by the producer just prior to shipment. At this point, however, a feeling developed that there might be some further relationship between swine production practices on the farms and the heavy shipping losses to the association. Accordingly a questionnaire dealing only with swine production and marketing was prepared and mailed over the signature of the county agent to all the farmers that had used the association during the years of 1925 and 1926. The 266 schedules returned represented 58.2 per cent of the total association membership. An immediate summarization of the collected data followed. (Pages 1 and 2 of Supplement.)

A conference was then called for the purpose of studying the information revealed by this survey. The following representatives were present: county agricultural agent, the manager and a director of the shipping association, district county agent, hog production specialists of the Animal Husbandry Department and the Marketing specialist of the Rural Economics Department. As a result of the problems presented a summary of conditions was made together with recommendations for correction and improvement, in outline form as follows:

1. SITUATION WITH REFERENCE TO:

- A. Importance of hogs in the county.
  - 1. Highest source of income being 21.66 per cent of total farm sales.
  - 2. Generally distributed throughout the county.
- B. Housing and farrowing conditions on farms.
  - 1. Permanent hog houses predominate in county.
  - 2. Estimate 85 per cent of pigs farrowed in permanent lots.
  - 3. Average number of litters raised per year two.
  - 4. Average number of pigs farrowed per litter 6.9, with 8.3 per cent dead pigs farrowed per litter and 8.4 per cent weak pigs farrowed per litter.

- C. Disease and parasite conditions on farms.
  - 1. Diseases considered as a problem - 25 per cent.
  - 2. Parasites recognized as a problem by 47 per cent.
  - 3. Worms recognized as a problem by 37 per cent.
- D. Feeding conditions on farms.
  - 1. Feeding considered as chief problem by 14 per cent.
  - 2. Improper feeding of brood sows and young pigs.
  - 3. A total of 40 per cent fed no mineral in ration - 26-1/2 per cent fed mineral occasionally.
  - 4. Lack of protein supplement in ration.
- E. Some marketing problems evidenced by producers.
  - 1. Many of the cars are being overloaded by the manager.
  - 2. Some shippers feeding hogs too heavily before delivery to association for shipment.
  - 3. Shrinks too heavy in many shipments.
  - 4. Shipping expenses too high.
  - 5. Shipping service not always available.
- F. Some implied marketing problems.
  - 1. Producers do not understand market grades.
  - 2. Producers do not understand importance of seasonal market movements.
  - 3. Producers do not understand market fluctuations.
  - 4. Producers do not understand the proper use of economic information.

## II. WHAT TO DO

- A. Correct feeding conditions by
  - 1. Using minerals.
  - 2. Feeding balanced protein rations for brood sows and pigs.
  - 3. The use of legume pastures in summer months.
  - 4. The use of protein supplements in dry lot feeding.
- B. Control parasites and diseases by
  - 1. Using clean houses for farrowing.
  - 2. Using clean lots for young pigs.
  - 3. Double treatment for cholera at time of weaning.
- C. Correct housing conditions by
  - 1. Adopting principles of McClean county system.
- D. Reduce transit losses by
  - 1. Limiting pre-shipping feed.
  - 2. Avoiding the overloading of cars.
  - 3. More care in trucking from farm to station.
  - 4. Producers using rations that will grow hogs better able to withstand the rigors of shipping.

- E. Reduce shipping expenses by
  - 1. Increasing volume.
  - 2. Merging shipping points for better railroad connections, improving service and economy in handling.
  - 3. Reducing transit losses.
  - 4. Shipping fewer light loads.
- F. Provide the producer with more information on
  - 1. Market grades.
  - 2. How to take advantage of seasonal market movements.
  - 3. Market fluctuations.
  - 4. Characteristic requirements of needs and demands of available market outlets.
  - 5. Cyclic trends of hog production.
  - 6. General economic information pertinent to the swine industry.

### III. HOW TO DO IT

- A. Hold a series of meetings in four communities and acquaint producers with situation by
  - 1. Presenting the analysis of conditions in the community.
  - 2. Presenting the analysis of conditions in the county.
  - 3. Pointing out solution in terms of practices and results.
  - 4. Demonstrating how to put solutions into practice.
  - 5. Stressing seasonal importance of meetings when possible.

### IV. KIND OF MEETINGS TO BE CONDUCTED

- A. Outline for first series.
  - 1. Discuss some market losses and their causes due to dead and crippled animals.
  - 2. Discuss some farm feeding losses, their causes, and probable effect on dead and crippled loss.
  - 3. Recommend some remedies for these farm and market losses.
  - 4. Give a mineral and supplemental feed mixing demonstration.
  - 5. Provide mimeograph material covering above discussion.
  - 6. Hold a question and answer forum.
  - 7. Lay plans for next meeting. (Page 3 of Supplement.)
- B. Outline for second series.
  - 1. Discuss the importance of seasonal market movement of Ohio hogs and suggest advantages favorable to Ohio that will help the farmer get the high net dollar.
  - 2. Discuss diseases and parasites and their influence on farm profits and time of marketing.
  - 3. Hold a question and answer forum.
  - 4. Discuss the advisability of a county wide grading demonstration.

V. FOLLOW UP WORK BY THE COUNTY AGENT ON FIRST SERIES OF MEETINGS.

1. Have neighbors meet and mix mineral and supplemental feed requirements where possible.
2. Cooperate with local elevators, feed stores or shipping agencies in having needed feed ingredients available.
3. Get a record of producers using the recommended mineral and supplemental rations.
4. Follow up with farm visits for further instructions and suggestions on use of feeds and management in general.

VI. SOME RESULTS ACCOMPLISHED SINCE 1926.

A. On the farm:

1. Producers have evidenced increased interest in production and marketing.
2. More mineral and supplemental feeds are being used in communities where meetings were held. A group of farmers took home 5 tons from one neighborhood "mixing bee."
3. Some demonstrational farms have been established on swine sanitation.

B. In the association:

1. The association management has been reorganized.
2. The business records of the association have been revised.
3. The bulk of the shipping has been concentrated to three points instead of seven.
4. The volume of the association has increased 32 per cent.
5. Marketing costs have been reduced 21 per cent.
6. Dead and crippled loss in shipping has been reduced 52 per cent.

C. Expansion of project:

1. The complete program with modifications has been expanded to three other counties, and will be continuous until all interested communities have been reached.
2. The demonstrational meeting on "some farm and market losses" has been extended to 17 other counties, and will be continued in these and other important swine counties as time permits.

In connection with the 1928 - 1929 swine program of an adjoining county we are adding a junior market pig club project in which the classes are to be graded according to terminal market classifications. The farm management workers will assist with problems connected with the farm execution of the swine sanitation project, in addition to the continuation of their established project dealing with dissemination of economic information.

Our program has not been a one man affair. The contributions from other departments of the extension service have been a vital factor in what success we may have had.

Mr. J. W. Wuichet of the Animal Husbandry Department, who has charge of extension work in swine production has cooperated in this work at all times and deserves equal credit for any advancement we have made with our joint production and marketing meetings. It has been a splendid and profitable relationship.

Mr. B. A. Wallace of our department has given you a report covering his related extension activities with the grain elevators. Some work of a similar nature has been done in the fields of dairy and poultry and egg marketing, and 1929 will see the beginning of a similar program developed in our important sheep producing counties (see Supplement.). Our experience of the past year has brought us face to face with the tremendous possibilities for further development of extension work along these lines, but as yet we are only "groping" in that direction.

In that conclusion we believe that any coordinated project must be flexible enough to be adapted to the varying conditions of county and community needs. Different phases of work will be the key note of development as county conditions vary. The county agent is the important factor in the success of such work, he needs assistance, not advice, in analyzing local conditions. There is no place for a stiff formal campaign project glorified with all the details so common to many such plans.

Furthermore, a program of this type will be difficult of execution where production and marketing or marketing and farm management activities are extended by the same individual. Correlation of work recognizes the necessity for broad program building. It also recognizes the fact that production and farm management specialists are likely to be poorly informed regarding the economic problems of marketing, and that the marketing specialist would be equally handicapped when he attempts to deal with the problems of production and farm management. It recognizes the existence of a close relationship between the marketing research programs of the experimental stations and marketing extension programs so that timely data will be available for extension use in meeting new problems as they may arise. And lastly it recognizes the farm and community viewpoint of the producer. To apply the principles of cooperation to a coordinated extension marketing, farm management and production program we recognize one of the basic principles of cooperative endeavor. It is well that we recognize in this cooperation movement, an instrument through which fundamental improvements in production, as well as better marketing, may be brought about because of the collective human relationship which is developed between the producer and the marketing machinery. It was an operative problem of a cooperative livestock shipping association that definitely pointed the way in Ohio.

MATERIAL SUPPLEMENTING THE PRECEDING DISCUSSION  
ON  
COORDINATING EXTENSION MARKETING  
FARM MANAGEMENT AND PRODUCTION PROGRAMS  
FROM A MARKETING STANDPOINT



DIVISION A

COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS  
STATE OF OHIO.

Ohio State University  
U. S. Dep't. of Agriculture and  
Shelby County Farm Bureau  
Cooperating

Extension Service  
County Agent Work

Sidney, Ohio  
Dec. 10, 1926

Dear Sir:

With the assistance of the Marketing Specialist of the Extension Department, we are studying the records of The Shelby Livestock Cooperative Association. In doing this work we are placing emphasis on our marketing losses and their causes, in order to reduce them and enable you to market your livestock more economically.

Since you have marketed livestock through this association and are interested in cutting down the losses, your cooperation is needed to aid us in collecting certain information we must have in order to study this problem effectively.

With this brief explanation, will you kindly sit down at your earliest convenience and answer the following questions and return to us in the enclosed envelope within seven days. Your reply will be kept strictly confidential.

Thanking you very kindly for this information, I am

Very truly yours,

R. W. Munger  
County Agricultural Agent

## LIVESTOCK PRODUCTION AND MARKETING IN SHELBY COUNTY

(Use pencil if you desire. It will be just as acceptable as pen and ink)

1. Name \_\_\_\_\_ Address \_\_\_\_\_

2. Average number of sows you breed for fall litters  
For spring litters

3. Average size of fall litters spring litters

4. Are your sows pure bred or grade Name of breed  
Sires pure bred or grade Name of breed

5. What months do your sows farrow for fall litters  
For spring litters

6. How many pigs were farrowed in the spring of 1926  
How many were strong weak dead

7. How many pigs were farrowed in the fall of 1926  
How many were strong weak dead

8. At what age do you wean your fall pigs

9. At what age do you wean your spring pigs

10. What feeds do you feed before washing

11. What feeds do you feed after weaning

12. Do you feed minerals in your ration  
Do you mix your own What is it composed of  
Do you use prepared minerals  
Give names of brands  
Do you feed minerals daily through the feeding period

13. Do pigs have pasture range or are they dry lot fed  
If pasture range is used is it bluegrass, alfalfa, or what

14. Are pigs treated for worms If so what method is used  
At what age are fall pigs treated  
At what age are spring pigs treated

15. Do you have any trouble with diseases, if so name them

16. Do you feed your hogs just prior to shipping them  
If so, how many hours before What feeds do you feed  
Are they wet or dry

17. If trucked are hogs carefully loaded  
If not, what is your objective

18. What months do you market your hogs

19. Which of the two factors, weight or price have the most influence upon the time you market your hogs Explain
20. Do you follow livestock market reports daily or only when you have something to sell
21. What is your biggest production problem
22. What is your biggest marketing problem

## DIVISION B

### OUTLINE ON THE PREVENTION OF LOSSES IN SWINE MARKETING,

by

C. W. Hammans  
Marketing Specialist

#### I. Losses

- a. On the Farm
  1. Diseases
  2. Parasites
  3. Improper feeding methods
  4. How these affect losses during process of marketing
- b. From Farm to Market
  1. On the truck
  2. At the loading station
  3. On the railroad
  4. At the market
  5. In the packing house
  6. How some of these losses are related to farm losses

#### II. Importance of Marketing Losses

- a. To the Swine Industry of Ohio
- b. From Dead and Crippled Animals
  1. Value in Ohio
  2. Where and how they occur
  3. Where absorbed
- c. Caused by Bruising
  1. Value in Ohio
  2. How they occur
  3. As observed at the packing house
  4. Where absorbed and what they mean to the producer

- d. Caused by Carcass Condemnation
  - 1. Value in Ohio
  - 2. Causes for
  - 3. As observed at packing house
  - 4. Where absorbed and what they mean to the producer

### III. How Handling Influences Marketing Losses

- a. On the Farm
- b. On the Truck
- c. At the Loading Station
  - 1. In the yards
  - 2. On the car
- d. By the Transportation Agency
  - 1. Switching
  - 2. Movement to market
  - 3. Transfer facilities
- e. By terminal market agencies
  - 1. Stock Yards Companies
  - 2. Commission Agencies

### IV. Remedies for Reducing Marketing Losses

- a. On the Farm
  - 1. Care in handling
  - 2. Use of farm hurdles
  - 3. Provide loading chutes
  - 4. Avoid overloading truck or wagon
  - 5. Use of flap jacks for driving
- b. At the Shipping Station
  - 1. Care in handling
  - 2. Careful car preparation
  - 3. Avoid overloading
- c. By Transporting Agency
  - 1. Provide proper loading facilities
  - 2. Provide clean cars
  - 3. Have sand available for bedding
  - 4. Careful switching and speedy transfers
- d. At the Market.
  - 1. Careful unloading
  - 2. Careful yard handling
  - 3. Use of flap jacks for alley driving

In presenting these factors at discussion or demonstration meetings in cooperation with the specialist in swine production, the problems of dead and crippled animals, and condemnation loss are given special emphasis because

they are closely allied with the production problems of disease conditions on the farm and feeding practices employed by the producer.

## OUTLINE ON THE PREVENTION OF LOSSES IN PORK PRODUCTION

by

J. W. Wuichet  
Swine Specialist

### I. Diseases

- a. Tuberculosis. Testing of cattle herds and poultry flocks as sources of infection.
- b. Cholera. Systematic immunization with anti-hog cholera serum and virus.
- c. Pnaumonia. Quarters free from drafts, protection from quick temperature changes and plenty of range for proper lung development.
- d. Enteritis. Sanitation and care in feeding.

### II. Parasites.

- a. External. Sanitation, dips and disinfectants.
- b. Internal. Sanitation based on the McClean County System.

### III. Improper feeding methods.

- a. Lack of sufficient amounts or variety of proteins.
  - 1. The so-called trinity mixture is recommended and amounts to feed suggested.
- b. Lack of minerals
  - 1. Mixture recommended - 2 parts ground limestone, 2 parts steamed bone meal and 1 part salt.
- c. Lack of vitamins
  - 1. Explanation made that with a good ration vitamins are not a serious factor but particularly with winter feeding, the poorer the ration, the more important is the vitamin supply.
- d. Feeds and methods causing high shrinks

In presenting these factors at discussion or demonstration meetings in cooperation with the specialist in livestock marketing, the problems under improper feeding methods are given particular emphasis because it is those factors which are more closely allied with the marketing problems.

Swine Meeting  
Suggestive Community Program

1. Introduction - 10 min. - County Agricultural Agent.
2. Some Farm and Market Losses and Their Causes - Marketing Specialist - 40 min.
  - a. Pass around photographs showing losses en route.
  - b. Pass around mimeograph data on losses.
3. Introduce Wuichet - 3 min. - County Agricultural Agent.
4. Some Remedies for Farm and Market Losses - Swine Specialist - 40 min.
  - a. Pass around photographs of experimental results with minerals.
  - b. Pass around bones showing experimental results with minerals.
  - c. Tin cup mineral demonstrations.
  - d. Tin cup supplemental feed demonstration.
  - e. Pass around mimeograph data on minerals, supplements and sanitation.
5. Questions and answers - 20 min.
6. Close Meeting ( By County Agricultural Agent ) - 10 min.

DIVISION C

PROPOSED CORRELATED PROGRAM

for

Logan County

FLOCK AND FLEECE IMPROVEMENT

Developed from the Production Viewpoint

by

L. A. Kauffman  
Sheep Specialist

I. General Survey of Situation

- a. County Agent, livestock shipping association manager, a small committee of livestock men and specialists in marketing and sheep husbandry met to talk over sheep situation in county and to consider outstanding problems.

- b. A statistical summary of the agriculture of the county showed 48,000 head of sheep. These sheep returned 25% of the income from livestock in the county. Out of 12,000 lambs shipped cooperatively in 1928 less than 60% were good enough to top the market. The reasons for this were:
  - 1. Lack of thrift in lambs due to parasites, particularly stomach worms.
  - 2. Poor feeding.
  - 3. Off type due to inferior breeding.
  - 4. Failure to dock and castrate.
  - 5. Inability of producer to tell when his lambs were fat.
- c. This committee agreed on a program of improvement which included:
  - 1. Parasite control.
  - 2. Use of pure-bred rams and more careful selection of brood ewes.
  - 3. Standardization of market lambs.
  - 4. Feeding of balanced rations.
  - 5. Proper preparation of fleeces for market and wool grading.

## II. Presentation of Situation to Extension Committeemen - January 1928.

At a subsequent meeting 120 extension committeemen met with the county agent and specialists to work out a county program for sheep improvement. The following is a synopsis of the meeting:

- a. Opening discussion by county agent:
  - 1. Purpose of meeting.
  - 2. General sheep situation in county.
  - 3. The need for improvement.
- b. Discussion by shipping association manager:
- c. Marketing problems presented by rural economics marketing specialist.
- d. Production problems presented by sheep specialist followed by lamb grading demonstration, carcass grading and cutting demonstration and posting of parasite infected sheep.

## III. Discussion by Committeemen and Development of County Program.

### IV. County Program.

- a. Conduct stomach worm control demonstrations in every township in county with sheep population of over 1,000..
  - 1. Where sheep are on one permanent pasture to treat every month from May until November.
  - 2. Where forage crops are grown or frequent changes of pasture can be made treatments to be given May 1, July 1, September 1, and November 1.

- b. Docking and Castrating demonstrations in each township. Each man present to actually dock and castrate lambs.
- c. Ram selection and ewe culling demonstrations in every township in July.
  - 1. Value of pure-bred rams to be discussed.
  - 2. Judging demonstrations.
  - 3. Comparison of rams brought in by neighbors and judging of them.
  - 4. Selection of ewe flock for, uniformity of type, size, age and fleece. Culling of off-type, poor fleeced, barren, old, poor uddered ewes.
  - 5. Discussion of breeding problems and value of county breeding dates.
  - 6. Recommendations that all lambs be yeaned in February and March so as to be marketed before July 15th.
- d. November meetings in each township on feeding problems.
  - 1. The need for balanced rations.
  - 2. Value of legume hays.
  - 3. The high protein supplements; their need and value in the ration.

#### PROGRAM FOR 1930

- e. January meetings on flock management problems and lamb troubles.

The sheep specialist will be assisted by the marketing specialist who will discuss the relationship of flock management to seasonal market movement of Ohio lambs. Comparison of Ohio movement to the United States movement and some advantages favorable to Ohio.

- f. May and June meetings on shearing, tying, preparation of fleece for market and wool grading demonstration. Sheep specialist to be assisted by Marketing specialist in this series of meetings. County Agent responsible for local publicity. Specialists to prepare news material for circulars, etc. Local community committeemen responsible for arrangements for local demonstrations, records, etc.

#### DIVISION D

##### POULTRY PRODUCTION AND MARKETING MEETING

- 9:30 Problems of Production of Eggs and Poultry.

- a. Hatching Eggs.
- b. Brooding Young Chicks.
- c. Feeding Young Chicks and Growing Pullets.

- d. Worm Control.
- e. Feeding Laying Hens.
- f. Home Care of Eggs.

10:00 Round Table. Questions from the Membership about Cooperative Marketing.

11:30 Egg Candling Demonstration and Egg Grade Show.

12:00 Family Pot-luck Dinner.

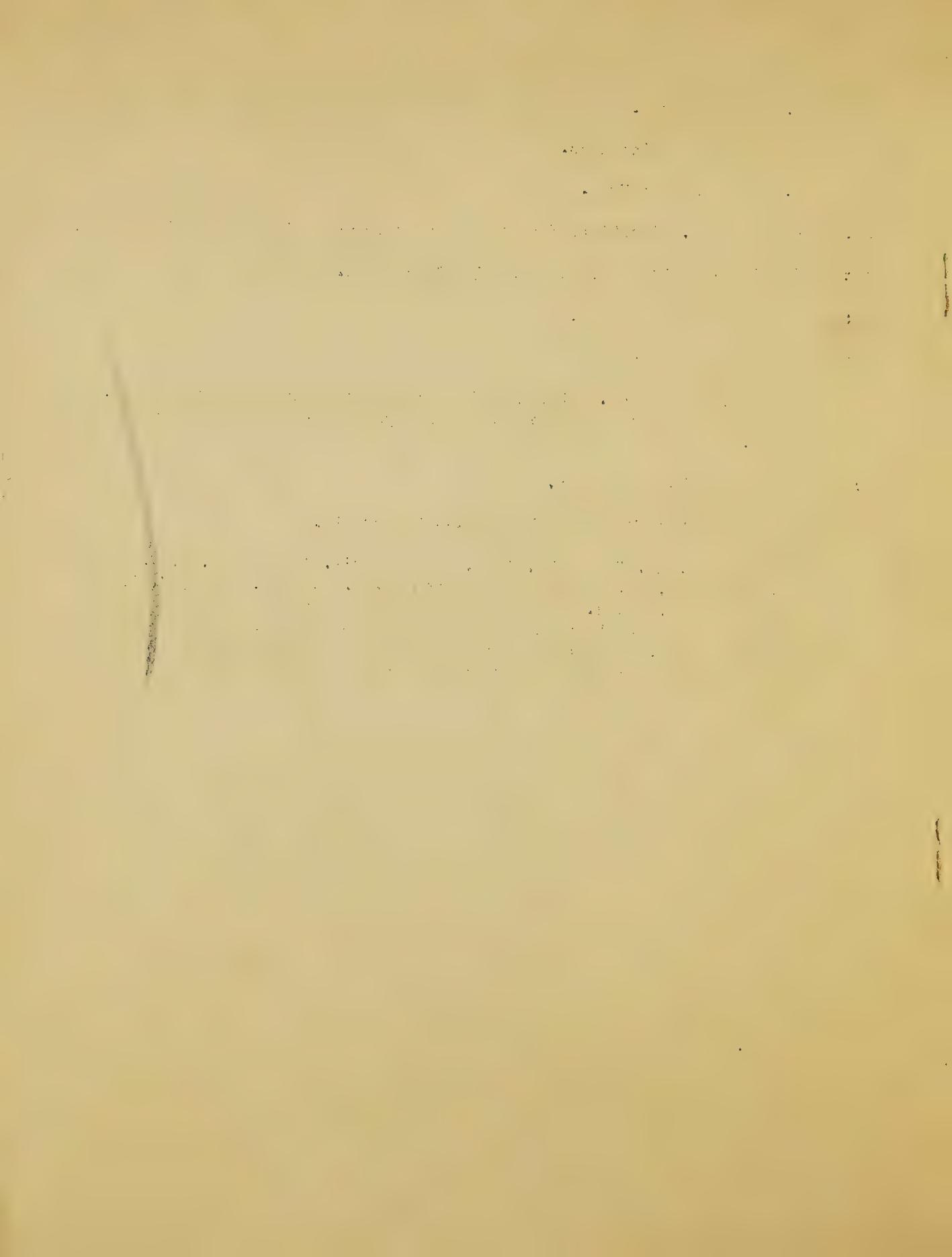
1:00 Local Entertainment

Moving Picture Show. This will be a first class moving picture show, showing cooperative marketing and other phases of agricultural practices.

2:00 Price Level Investigation.

3:00 The Cooperative Marketing Program.-- Membership.

Mr. Hammans, Mr. Wertz, Mr. Cray, County Agr'l. Agents, Mr. E. H. Bond, Mr. Wm. Ellis, Mr. Carl Vandervort and Mr. F. I. Bell. Also, M. L. Howell and Mr. Lloyd, will be the speakers to appear on the program at different meetings to discuss the questions and suggestions outlined in the program. This program is general and the plans are for the purposes of writing in the numbers which are of a local entertainment feature.



X

## COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS

U. S. Department of Agriculture  
and State Agricultural Colleges  
Cooperating

Extension Service, Office of  
Cooperative Extension Work,  
Washington, D. C.

*AUG 1 1929*  
**COORDINATING EXTENSION MARKETING, FARM MANAGEMENT, AND  
PRODUCTION PROGRAMS FROM A MARKETING STANDPOINT\***

C. W. Hammans,  
Marketing Specialist,  
College of Agriculture, Ohio State University



The assignment of this subject has caused the writer considerable concern for we have been able to find but little published material dealing specifically with coordinating relationship of commodity subject matter extension projects. Since developments along these lines have been recent and have not yet apparently found their way into printed form we directed the following query to eight central states. "Do you have any operative or planned extension activities in your State which attempts to coordinate extension marketing, farm management and production programs into a unified county project adapted to its community needs?" In the replies received we noted that many of the States were giving the question considerable thought and in a few instances had done some work along these lines, although no written continuous program of projects has yet been evidenced. As one State puts it, "no doubt, we are groping in that direction." Some of the statements made are significant.

A representative of The Farm Management Department of The Missouri College of Agriculture makes the following comment:

"At this time, I am engaged in writing up a new program of work in which I propose to use as a vehicle for farm management extension, and if possible, for marketing extension, the agricultural outlook project. In the past three years, we have been holding a State wide series of one day regional agricultural outlook conferences in February and March, 2nd, a less extensive series on individual commodity price situations in the summer or fall months, as the occasion justifies.

"While this type of extension work has been an unqualified success and has met with the enthusiastic approval and plainly evident interest of farmers, we have felt that there should be tied in with this work year round activities on the part of county extension agents, local leaders and

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\*Address presented before the Central States Extension Conference, Purdue University, La Fayette, Ind., April 24 to 26, 1929.

DISTRIBUTION: A copy of this pamphlet has been sent to extension directors, marketing extension specialists, and State county agent leaders.

the specialist concerned, in which method and result demonstrations would be a part. A "Farm Budgeting Project" would seem to offer a foot hold for such demonstrations in farm management and a means of developing some farm management demonstrations through farm accounting. As yet, we have not been able to settle upon a definite tie up of marketing extension work with this program of work."

A different approach is seen by the following statement made by The Department of Rural Economics of the University of Nebraska:

"The farm management and market specialists office in the Department of Rural Economics and are responsible to the department for subject matter. As a result their programs are coordinated, although they are really distinct programs instead of one enlarged program.

"Several of the county extension agents are planning to use the results from farm record books rather extensively as a basis for a county production program. The agent in Cass County, Nebraska, where we have had the most farm account books for the longest period of time is using his results quite extensively as a basis for his production program. He is succeeding so well that quite a good many of the other agents have come to believe that his plan furnishes the only definite base."

A third viewpoint is expressed by a representative of the Department of Markets of the University of Kentucky. His summary is as follows:

"In Kentucky we have attempted practically nothing along this line with the exception of egg marketing, which has been planned and which will be carried out at a future time.

"Our marketing specialist worked with the county agent in Grayson County, Kentucky, and visited a number of buyers of eggs in that county. At these visits the need for buying according to grade was emphasized and it is hoped that the buyers will cooperate with us and buy eggs according to grade. One big buyer has already agreed to buy eggs according to grade. It is planned as soon as the buyers agree to buy eggs according to grade to go into Grayson County and hold a series of meetings. These meetings will be attended by our marketing specialist and by a poultry specialist from the Poultry Department. The marketing specialist will discuss the marketing of eggs with special emphasis on the need for careful grading and the buying of eggs according to grade. He will also demonstrate egg grading at the meetings. The poultry specialist will talk generally in regard to poultry production and emphasize the need for standardization of breeds to get eggs of uniform color and also the need for proper feeding and proper handling of eggs. Such a program we feel will result in a large percentage of good eggs being sold in Grayson County, and will also mean that the producer will be paid a higher price for good eggs.

"While in Minnesota I did some marketing extension work. One of our projects was to improve the quality of products marketed by growers in Minnesota. A series of potato schools were held which I attended as mar-

keting specialist, and Mr. Rose, our extension plant pathologist, was also present. I talked about the economic situation in the potato industry and the need for marketing high grade potatoes. In this connection I emphasized proper grading and demonstrated the U. S. grades. Mr. Rose talked about potato production, especially methods of disease control. We felt this was essential because it is necessary to produce potatoes free from disease if potatoes of high quality are to be marketed. These meetings were fairly well attended and were a means of educating the grower to produce better potatoes and market them properly."

A different type of development is noted in Indiana where detailed studies of agricultural conditions have been made in a number of counties. They plan to use the data secured as a basis of extension work. In Ohio, county analysis stressing the sources of income is growing in use as a guide for building county programs. Seasonal meetings on timely economic information have been successfully conducted in both Ohio and Iowa during the past two or three years.

From the above comments we note three plans each attempting to bring about a closer correlation of certain extension activities - one between marketing and farm management, one between farm management and production and one between marketing and production. Every State must necessarily develop its own individual approach to the problem. A plan suitable to one may not meet the required conditions of another. It should make little difference, however, whether farm management, production or marketing is used as the vehicle of program development if there is a real need and a demand for a correlated program. Certainly a closer unity of working relationships will grow out of these associations as the proposed projects pass through the actual operative stage of experimentation.

The time has certainly arrived when we can no longer think of the problems involved in any extensive scale of agricultural marketing, or deal with the economics of market movements of products, or reduce the handling and distributive food losses without encountering some of the difficulties found in the production processes.

For example, we know of an Ohio county where about 66% of the veal calves sell for a premium on the market. Consequently those who sell calves are generally well satisfied with their returns. This condition when analyzed, however, is largely a reflection of a pure bred sire project put on in the county some six or seven years ago. In this same county only about 40% of the lambs are being sold in the top grades on the market. Obviously many of the sheep producers have not been satisfied with the market grades received and the corresponding price paid for their lambs. They think something is wrong and they are right. But the trouble exists largely with the producer. He does not appreciate the relationship and the importance of controlling parasites and the necessity of proper feeding if he is to make finished lambs at the weight demanded by the higher quality market grades.

To further illustrate the marketing viewpoint we might analyze some of the losses which occur during the process of marketing hogs. Approximately 150,000 hog carcasses were condemned under Federal Inspection in 1928. On the basis of the average Chicago price paid for packer and shipper purchases this loss approximated three and a quarter million dollars. It is important to note in this connection that 49% of this loss was due to hog cholera and tuberculosis, two farm diseases, the control of which lies almost entirely within the hands of the producer. Sooner or later packer killing sheets will determine the location of heavy disease infected areas. Under such conditions one cannot criticise the packer for avoiding further purchases from these districts, as first choice, or a discounting of price paid accordingly to cover the occurrence of such loss. There are places in the Corn Belt where such conditions exist. The producer who is unfortunate enough to be raising hogs in such places has a real marketing problem to meet. In Ohio this situation becomes more critical where cooperative direct-to-packer selling is being developed in some counties on the basis of a guaranteed yield and disease free carcasses on the rail. On the other hand these marketing losses are small compared to corresponding production losses. The average annual farm loss from hog cholera alone was approximately \$20,000,000 for the years 1920 to 1928 inclusive according to a statement made by the Bureau of Animal Industry. No one can deny an existing relationship in this situation. The elimination of these farm losses would automatically eliminate the corresponding market losses.

Since this loss problem is combined in both the production and the marketing processes it would seem that the best extension approach to its solution would be by a combined project executed by both a marketing specialist and a hog production specialist. The producer point of view should be the guide to its development. The farmer, not the extension service, is face to face with the problems involved in the production and marketing of quality hogs. Thus the extension man in marketing must concern himself not only with specific marketing problems but with farm and community problems related to marketing.

Considerable work along these lines has been done on a coordinated extension marketing and extension production project in Ohio during the past two years. To illustrate the method of approach we will make a rather detailed statement covering the development of our operative marketing and production swine program.

Back in 1926 we received a request from Mr. R. W. Munger, county agricultural agent of Shelby County, to attend the annual meeting of the Shelby Livestock Cooperative Association. The chief problem for discussion was that of raising the shipping costs four cents per hundredweight in order to meet a growing treasury deficit. After due deliberation the members voted the increase. However, the board was not satisfied that the trouble had been corrected and later authorized a complete analysis of the shipping records in order to determine the source of the leak. The county agent and myself were asked to cooperate with the manager in formulating plans for the making and the supervision of the study. In this connection

we secured Mr. W. B. Stout, the Smith Hughes Vocational Agricultural Instructor of the Sidney High School to do the work; he, in return to receive graduate credit at the University.

A complete analysis of the shipping records was made for the years of 1925 and 1926. It developed that a loss of \$3500 was incurred to the association due to dead and crippled animals in transit. A further analysis showed that 82.4% of the loss had occurred in the hog consignments which comprised 63% of the total head shipments for the two years. This hog loss was equivalent to an insurance fund cost of seven cents for every hundred pounds shipped in 1925 and eleven cents for every hundred pounds shipped in 1926 or an average for the two years of 8.5 cents. This loss constituted about half of the total home marketing charges of the association. Apparently this was one reason why the total marketing costs had been advanced from 73.9 cents in 1925 to 76.9 cents per hundredweight in 1926 with a decline in volume of 30 decks.

Part of this dead and crippled loss was attributed to improper loading on the part of this manager, part to rough handling by the railroad, and part to the improper handling of the hogs by the producer just prior to shipment. At this point, however, a feeling developed that there might be some further relationship between swine production practices on the farms and the heavy shipping losses to the association. Accordingly a questionnaire dealing only with swine production and marketing was prepared and mailed over the signature of the county agent to all the farmers that had used the association during the years of 1925 and 1926. The 286 schedules returned represented 58.2 per cent of the total association membership. An immediate summarization of the collected data followed. (Pages 1 and 2 of Supplement.)

A conference was then called for the purpose of studying the information revealed by this survey. The following representatives were present: county agricultural agent, the manager and a director of the shipping association, district county agent, hog production specialists of the Animal Husbandry Department and the Marketing specialist of the Rural Economics Department. As a result of the problems presented a summary of conditions was made together with recommendations for correction and improvement, in outline form as follows:

1. SITUATION WITH REFERENCE TO:

- A. Importance of hogs in the county.
  - 1. Highest source of income being 21.66 per cent of total farm sales.
  - 2. Generally distributed throughout the county.
  
- B. Housing and farrowing conditions on farms.
  - 1. Permanent hog houses predominate in county.
  - 2. Estimate 85 per cent of pigs farrowed in permanent lots.
  - 3. Average number of litters raised per year two.
  - 4. Average number of pigs farrowed per litter 6.9, with 8.3 per cent dead pigs farrowed per litter and 8.4 per cent weak pigs farrowed per litter.

- C. Disease and parasite conditions on farms.
  - 1. Diseases considered as a problem - 25 per cent.
  - 2. Parasites recognized as a problem by 47 per cent.
  - 3. Worms recognized as a problem by 37 per cent.
- D. Feeding conditions on farms.
  - 1. Feeding considered as chief problem by 14 per cent.
  - 2. Improper feeding of brood sows and young pigs.
  - 3. A total of 40 per cent fed no mineral in ration - 26-1/2 per cent fed mineral occasionally.
  - 4. Lack of protein supplement in ration.
- E. Some marketing problems evidenced by producers.
  - 1. Many of the cars are being overloaded by the manager.
  - 2. Some shippers feeding hogs too heavily before delivery to association for shipment.
  - 3. Shrinks too heavy in many shipments.
  - 4. Shipping expenses too high.
  - 5. Shipping service not always available.
- F. Some implied marketing problems.
  - 1. Producers do not understand market grades.
  - 2. Producers do not understand importance of seasonal market movements.
  - 3. Producers do not understand market fluctuations.
  - 4. Producers do not understand the proper use of economic information.

## II. WHAT TO DO

- A. Correct feeding conditions by
  - 1. Using minerals.
  - 2. Feeding balanced protein rations for brood sows and pigs.
  - 3. The use of legume pastures in summer months.
  - 4. The use of protein supplements in dry lot feeding.
- B. Control parasites and diseases by
  - 1. Using clean houses for farrowing.
  - 2. Using clean lots for young pigs.
  - 3. Double treatment for cholera at time of weaning.
- C. Correct housing conditions by
  - 1. Adopting principles of McClean county system.
- D. Reduce transit losses by
  - 1. Limiting pre-shipping feed.
  - 2. Avoiding the overloading of cars.
  - 3. More care in trucking from farm to station.
  - 4. Producers using rations that will grow hogs better able to withstand the rigors of shipping.

- E. Reduce shipping expenses by
  - 1. Increasing volume.
  - 2. Merging shipping points for better railroad connections; improving service and economy in handling.
  - 3. Reducing transit losses.
  - 4. Shipping fewer light loads.
- F. Provide the producer with more information on
  - 1. Market grades.
  - 2. How to take advantage of seasonal market movements.
  - 3. Market fluctuations.
  - 4. Characteristic requirements of needs and demands of available market outlets.
  - 5. Cyclic trends of hog production.
  - 6. General economic information pertinent to the swine industry.

### III. HOW TO DO IT

- A. Hold a series of meetings in four communities and acquaint producers with situation by
  - 1. Presenting the analysis of conditions in the community.
  - 2. Presenting the analysis of conditions in the county.
  - 3. Pointing out solution in terms of practices and results.
  - 4. Demonstrating how to put solutions into practice.
  - 5. Stressing seasonal importance of meetings when possible.

### IV. KIND OF MEETINGS TO BE CONDUCTED

- A. Outline for first series.
  - 1. Discuss some market losses and their causes due to dead and crippled animals.
  - 2. Discuss some farm feeding losses, their causes, and probable effect on dead and crippled loss.
  - 3. Recommend some remedies for these farm and market losses.
  - 4. Give a mineral and supplemental feed mixing demonstration.
  - 5. Provide mimeograph material covering above discussion.
  - 6. Hold a question and answer forum.
  - 7. Lay plans for next meeting. (Page 3 of Supplement.)
- B. Outline for second series.
  - 1. Discuss the importance of seasonal market movement of Ohio hogs and suggest advantages favorable to Ohio that will help the farmer get the high net dollar.
  - 2. Discuss diseases and parasites and their influence on farm profits and time of marketing.
  - 3. Hold a question and answer forum.
  - 4. Discuss the advisability of a county wide grading demonstration.

V. FOLLOW UP WORK BY THE COUNTY AGENT ON FIRST SERIES OF MEETINGS.

1. Have neighbors meet and mix mineral and supplemental feed requirements where possible.
2. Cooperate with local elevators, feed stores or shipping agencies in having needed feed ingredients available.
3. Get a record of producers using the recommended mineral and supplemental rations.
4. Follow up with farm visits for further instructions and suggestions on use of feeds and management in general.

VI. SOME RESULTS ACCOMPLISHED SINCE 1926.

A. On the farm:

1. Producers have evidenced increased interest in production and marketing.
2. More mineral and supplemental feeds are being used in communities where meetings were held. A group of farmers took home 5 tons from one neighborhood "mixing bee."
3. Some demonstrational farms have been established on swine sanitation.

B. In the association:

1. The association management has been reorganized.
2. The business records of the association have been revised.
3. The bulk of the shipping has been concentrated to three points instead of seven.
4. The volume of the association has increased 32 per cent.
5. Marketing costs have been reduced 21 per cent.
6. Dead and crippled loss in shipping has been reduced 52 per cent.

C. Expansion of project:

1. The complete program with modifications has been expanded to three other counties, and will be continuous until all interested communities have been reached.
2. The demonstrational meeting on "some farm and market losses" has been extended to 17 other counties, and will be continued in these and other important swine counties as time permits.

In connection with the 1928 - 1929 swine program of an adjoining county we are adding a junior market pig club project in which the classes are to be graded according to terminal market classifications. The farm management workers will assist with problems connected with the farm execution of the swine sanitation project, in addition to the continuation of their established project dealing with dissemination of economic information.

Our program has not been a one man affair. The contributions from other departments of the extension service have been a vital factor in what success we may have had.

Mr. J. W. Wuichet of the Animal Husbandry Department, who has charge of extension work in swine production has cooperated in this work at all times and deserves equal credit for any advancement we have made with our joint production and marketing meetings. It has been a splendid and profitable relationship.

Mr. B. A. Wallace of our department has given you a report covering his related extension activities with the grain elevators. Some work of a similar nature has been done in the fields of dairy and poultry and egg marketing, and 1929 will see the beginning of a similar program developed in our important sheep producing counties (see Supplement.). Our experience of the past year has brought us face to face with the tremendous possibilities for further development of extension work along these lines, but as yet we are only "groping" in that direction.

In that conclusion we believe that any coordinated project must be flexible enough to be adapted to the varying conditions of county and community needs. Different phases of work will be the key note of development as county conditions vary. The county agent is the important factor in the success of such work, he needs assistance, not advice, in analyzing local conditions. There is no place for a stiff formal campaign project glorified with all the details so common to many such plans.

Furthermore, a program of this type will be difficult of execution where production and marketing or marketing and farm management activities are extended by the same individual. Correlation of work recognizes the necessity for broad program building. It also recognizes the fact that production and farm management specialists are likely to be poorly informed regarding the economic problems of marketing, and that the marketing specialist would be equally handicapped when he attempts to deal with the problems of production and farm management. It recognizes the existence of a close relationship between the marketing research programs of the experimental stations and marketing extension programs so that timely data will be available for extension use in meeting new problems as they may arise. And lastly it recognizes the farm and community viewpoint of the producer. To apply the principles of cooperation to a coordinated extension marketing, farm management and production program we recognize one of the basic principles of cooperative endeavor. It is well that we recognize in this cooperation movement, an instrument through which fundamental improvements in production, as well as better marketing, may be brought about because of the collective human relationship which is developed between the producer and the marketing machinery. It was an operative problem of a cooperative livestock shipping association that definitely pointed the way in Ohio.

MATERIAL SUPPLEMENTING THE PRECEDING DISCUSSION  
ON  
COORDINATING EXTENSION MARKETING  
FARM MANAGEMENT AND PRODUCTION PROGRAMS  
FROM A MARKETING STANDPOINT



DIVISION A

COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS  
STATE OF OHIO.

Ohio State University  
U. S. Dep't. of Agriculture and  
Shelby County Farm Bureau  
Cooperating

Extension Service  
County Agent Work

Sidney, Ohio  
Dec. 10, 1926

Dear Sir:

With the assistance of the Marketing Specialist of the Extension Department, we are studying the records of The Shelby Livestock Cooperative Association. In doing this work we are placing emphasis on our marketing losses and their causes, in order to reduce them and enable you to market your livestock more economically.

Since you have marketed livestock through this association and are interested in cutting down the losses, your cooperation is needed to aid us in collecting certain information we must have in order to study this problem effectively.

With this brief explanation, will you kindly sit down at your earliest convenience and answer the following questions and return to us in the enclosed envelope within seven days. Your reply will be kept strictly confidential.

Thanking you very kindly for this information, I am

Very truly yours,

R. W. Munger  
County Agricultural Agent

LIVESTOCK PRODUCTION AND MARKETING IN SHELBY COUNTY  
(Use pencil if you desire. It will be just as acceptable as pen and ink)

1. Name \_\_\_\_\_ Address \_\_\_\_\_
2. Average number of sows you breed for fall litters  
For spring litters
3. Average size of fall litters spring litters
4. Are your sows pure bred or grade Name of breed  
Sires pure bred or grade Name of breed
5. What months do your sows farrow for fall litters  
For spring litters
6. How many pigs were farrowed in the spring of 1926  
How many were strong weak dead
7. How many pigs were farrowed in the fall of 1926  
How many were strong weak dead
8. At what age do you wean your fall pigs
9. At what age do you wean your spring pigs
10. What feeds do you feed before washing
11. What feeds do you feed after weaning
12. Do you feed minerals in your ration  
Do you mix your own What is it composed of  
Do you use prepared minerals  
Give names of brands  
Do you feed minerals daily through the feeding period
13. Do pigs have pasture range or are they dry lot fed  
If pasture range is used is it bluegrass, alfalfa, or what
14. Are pigs treated for worms If so what method is used  
At what age are fall pigs treated  
At what age are spring pigs treated
15. Do you have any trouble with diseases, if so name them
16. Do you feed your hogs just prior to shipping them  
If so, how many hours before What feeds do you feed  
Are they wet or dry
17. If trucked are hogs carefully loaded  
If not, what is your objective
18. What months do you market your hogs

19. Which of the two factors, weight or price have the most influence upon the time you market your hogs Explain
20. Do you follow livestock market reports daily or only when you have something to sell
21. What is your biggest production problem
22. What is your biggest marketing problem

## DIVISION B

### OUTLINE ON THE PREVENTION OF LOSSES IN SWINE MARKETING

by

C. W. Hammans  
Marketing Specialist

#### I. Losses

- a. On the Farm
  1. Diseases
  2. Parasites
  3. Improper feeding methods
  4. How these affect losses during process of marketing
- b. From Farm to Market
  1. On the truck
  2. At the loading station
  3. On the railroad
  4. At the market
  5. In the packing house
  6. How some of these losses are related to farm losses

#### II. Importance of Marketing Losses

- a. To the Swine Industry of Ohio
- b. From Dead and Crippled Animals
  1. Value in Ohio
  2. Where and how they occur
  3. Where absorbed
- c. Caused by Bruising
  1. Value in Ohio
  2. How they occur
  3. As observed at the packing house
  4. Where absorbed and what they mean to the producer

- d. Caused by Carcass Condemnation
  - 1. Value in Ohio
  - 2. Causes for
  - 3. As observed at packing house
  - 4. Where absorbed and what they mean to the producer

### III. How Handling Influences Marketing Losses

- a. On the Farm
- b. On the Truck
- c. At the Loading Station
  - 1. In the yards
  - 2. On the car
- d. By the Transportation Agency
  - 1. Switching
  - 2. Movement to market
  - 3. Transfer facilities
- e. By terminal market agencies
  - 1. Stock Yards Companies
  - 2. Commission Agencies

### IV. Remedies for Reducing Marketing Losses

- a. On the Farm
  - 1. Care in handling
  - 2. Use of farm hurdles
  - 3. Provide loading chutes
  - 4. Avoid overloading truck or wagon
  - 5. Use of flap jacks for driving
- b. At the Shipping Station
  - 1. Care in handling
  - 2. Careful car preparation
  - 3. Avoid overloading
- c. By Transporting Agency
  - 1. Provide proper loading facilities
  - 2. Provide clean cars
  - 3. Have sand available for bedding
  - 4. Careful switching and speedy transfers
- d. At the Market.
  - 1. Careful unloading
  - 2. Careful yard handling
  - 3. Use of flap jacks for alley driving

In presenting these factors at discussion or demonstration meetings in cooperation with the specialist in swine production, the problems of dead and crippled animals, and condemnation loss are given special emphasis because

they are closely allied with the production problems of disease conditions on the farm and feeding practices employed by the producer.

## OUTLINE ON THE PREVENTION OF LOSSES IN PORK PRODUCTION

by

J. W. Wuichet  
Swine Specialist

### I. Diseases

- a. Tuberculosis. Testing of cattle herds and poultry flocks as sources of infection.
- b. Cholera. Systematic immunization with anti-hog cholera serum and virus.
- c. Pneumonia. Quarters free from drafts, protection from quick temperature changes and plenty of range for proper lung development.
- d. Enteritis. Sanitation and care in feeding.

### II. Parasites.

- a. External. Sanitation, dips and disinfectants.
- b. Internal. Sanitation based on the McClean County System.

### III. Improper feeding methods.

- a. Lack of sufficient amounts or variety of proteins.
  - 1. The so-called trinity mixture is recommended and amounts to feed suggested.
- b. Lack of minerals
  - 1. Mixture recommended - 2 parts ground limestone, 2 parts steamed bone meal and 1 part salt.
- c. Lack of vitamins
  - 1. Explanation made that with a good ration vitamins are not a serious factor but particularly with winter feeding, the poorer the ration, the more important is the vitamin supply.
- d. Feeds and methods causing high shrinks

In presenting these factors at discussion or demonstration meetings in cooperation with the specialist in livestock marketing, the problems under improper feeding methods are given particular emphasis because it is those factors which are more closely allied with the marketing problems.

Swine Meeting  
Suggestive Community Program

1. Introduction - 10 min. - County Agricultural Agent.
2. Some Farm and Market Losses and Their Causes - Marketing Specialist - 40 min.
  - a. Pass around photographs showing losses en route.
  - b. Pass around mimeograph data on losses.
3. Introduce Wuichet - 3 min. - County Agricultural Agent.
4. Some Remedies for Farm and Market Losses - Swine Specialist - 40 min.
  - a. Pass around photographs of experimental results with minerals.
  - b. Pass around bones showing experimental results with minerals.
  - c. Tin cup mineral demonstrations.
  - d. Tin cup supplemental feed demonstration.
  - e. Pass around mimeograph data on minerals, supplements and sanitation.
5. Questions and answers - 20 min.
6. Close Meeting ( By County Agricultural Agent ) - 10 min.

DIVISION C

PROPOSED CORRELATED PROGRAM

for

Logan County

FLOCK AND FLEECE IMPROVEMENT

Developed from the Production Viewpoint

by

L. A. Kauffman  
Sheep Specialist

I. General Survey of Situation

- a. County Agent, livestock shipping association manager, a small committee of livestock men and specialists in marketing and sheep husbandry met to talk over sheep situation in county and to consider outstanding problems.

b. A statistical summary of the agriculture of the county showed 48,000 head of sheep. These sheep returned 25% of the income from livestock in the county. Out of 12,000 lambs shipped cooperatively in 1928 less than 60% were good enough to top the market. The reasons for this were:

1. Lack of thrift in lambs due to parasites, particularly stomach worms.
2. Poor feeding.
3. Off type due to inferior breeding.
4. Failure to dock and castrate.
5. Inability of producer to tell when his lambs were fat.

c. This committee agreed on a program of improvement which included:

1. Parasite control.
2. Use of pure-bred rams and more careful selection of brood ewes.
3. Standardization of market lambs.
4. Feeding of balanced rations.
5. Proper preparation of fleeces for market and wool grading.

## II. Presentation of Situation to Extension Committeemen - January 1928.

At a subsequent meeting 120 extension committeemen met with the county agent and specialists to work out a county program for sheep improvement. The following is a synopsis of the meeting:

a. Opening discussion by county agent:

1. Purpose of meeting.
2. General sheep situation in county.
3. The need for improvement.

b. Discussion by shipping association manager:

c. Marketing problems presented by rural economics marketing specialist.

d. Production problems presented by sheep specialist followed by lamb grading demonstration, carcass grading and cutting demonstration and posting of parasite infected sheep.

## III. Discussion by Committeemen and Development of County Program.

### IV. County Program.

a. Conduct stomach worm control demonstrations in every township in county with sheep population of over 1,000.

1. Where sheep are on one permanent pasture to treat every month from May until November.
2. Where forage crops are grown or frequent changes of pasture can be made treatments to be given May 1, July 1, September 1, and November 1.

- b. Docking and Castrating demonstrations in each township. Each man present to actually dock and castrate lambs.
- c. Ram selection and ewe culling demonstrations in every township in July.
  - 1. Value of pure-bred rams to be discussed.
  - 2. Judging demonstrations.
  - 3. Comparison of rams brought in by neighbors and judging of them.
  - 4. Selection of ewe flock for, uniformity of type, size, age and fleece. Culling of off-type, poor fleeced, barren, old, poor uddered ewes.
  - 5. Discussion of breeding problems and value of county breeding dates.
  - 6. Recommendations that all lambs be yeaned in February and March so as to be marketed before July 15th.
- d. November meetings in each township on feeding problems.
  - 1. The need for balanced rations.
  - 2. Value of legume hays.
  - 3. The high protein supplements; their need and value in the ration.

#### PROGRAM FOR 1930

- e. January meetings on flock management problems and lamb troubles.

The sheep specialist will be assisted by the marketing specialist who will discuss the relationship of flock management to seasonal market movement of Ohio lambs. Comparison of Ohio movement to the United States movement and some advantages favorable to Ohio.

- f. May and June meetings on shearing, tying, preparation of fleece for market and wool grading demonstration. Sheep specialist to be assisted by Marketing specialist in this series of meetings. County Agent responsible for local publicity. Specialists to prepare news material for circulars, etc. Local community committeemen responsible for arrangements for local demonstrations, records, etc.

#### DIVISION D

##### POULTRY PRODUCTION AND MARKETING MEETING

- 9:30 Problems of Production of Eggs and Poultry.

- a. Hatching Eggs.
- b. Brooding Young Chicks.
- c. Feeding Young Chicks and Growing Pullets.

d. Worm Control.

e. Feeding Laying Hens.

f. Home Care of Eggs.

10:00 Round Table. Questions from the Membership about Cooperative Marketing.

11:30 Egg Candling Demonstration and Egg Grade Show.

12:00 Family Pot-luck Dinner.

1:00 Local Entertainment

Moving Picture Show. This will be a first class moving picture show, showing cooperative marketing and other phases of agricultural practices.

2:00 Price Level Investigation.

3:00 The Cooperative Marketing Program--- Membership.

Mr. Hammans, Mr. Wertz, Mr. Cray, County Agr'l. Agents, Mr. E. H. Bond, Mr. Wm. Ellis, Mr. Carl Vandervort and Mr. F. I. Bell. Also, M. L. Howell and Mr. Lloyd, will be the speakers to appear on the program at different meetings to discuss the questions and suggestions outlined in the program. This program is general and the plans are for the purposes of writing in the numbers which are of a local entertainment feature.

6. *Phragmites* *australis* (L.) Trin. ex Stev.